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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,945	03/19/2004	Kenichi Shimooka	TSM-37	7176

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EXAMINER	
PERUNGAVOOR, VENKATANARAY	
ART UNIT	**PAPER NUMBER**
2132	

DATE MAILED: 02/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/803,945	SHIMOOKA ET AL.	
	Examiner	Art Unit	
	Venkatanarayanan Perungavoor	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-17,19 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-17,19 and 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/04, 1/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

   Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 5, 11-13 are rejected under 35 USC § 101 as they recite a software program per se which is non-statutory subject matter. See MPEP 2106, IV, B, 1(a).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

   A person shall be entitled to a patent unless –

   (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1-7, 9-17, 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,483,649 to Kuznetsov et al.(hereinafter Kuznetsov).

5. Regarding Claim 1, Kuznetsov discloses the data protection apparatus with a computer system having a storage volume(Fig. 1 item 32), a computer for reading/writing data(Fig. 1 item 22), a control unit for controlling communication between computer and storage volume(Fig.1 item 30), a event detection unit for detecting event occurrence(Col 6 Ln 20-47 & Fig. 1 item 120A), a path

disconnection unit for stop communication between computer and storage volume(Col 5 Ln 36-45 & Col 4 Ln 16-23 & Fig. 1 item 120B).

6. Regarding Claim 2, Kuznetsov discloses the illegal intrusion detection unit for detecting illegal intrusion(Fig. 1 item 135, 137, 139 & Col 16 Ln 26-Col 17 Ln 9), further the event detection unit(see Fig. 1 item 120A) receiving the detection of intrusion from illegal intrusion detection unit and the path disconnection unit stops the communication from computer and storage volume(Fig. 1 item 120).

7. Regarding Claim 3, Kuznetsov discloses the computer virus detection unit detecting viruses in storage see Abstract & Col 15 Ln 30-64, event detection unit receiving detection form computer virus detection unit see Fig. 1 item 120A, and path disconnection unit to stop communication upon detection of virus see Fig. 1 item 120.

8. Regarding Claim 4, 5, 6, 12, Kuznetsov discloses the data protection apparatus with a computer system having a storage volume(Fig. 1 item 32), a computer for reading/writing data(Fig. 1 item 22), a control unit for controlling communication between computer and storage volume(Fig.1 item 30), a event detection unit for detecting event occurrence(Col 6 Ln 20-47 & Fig. 1 item 120A), a path disconnection unit for stop communication between computer and storage volume(Col 5 Ln 36-45 & Col 4 Ln 16-23 & Fig. 1 item 120B).

9. Regarding Claim 7, 10, 11, 13, 20, Kuznetsov discloses the data protection apparatus with a computer system having a storage volume(Fig. 1 item 32), a computer for reading/writing data(Fig. 1 item 22), a control unit for controlling communication between storage volume(Fig.1 item 30) and replicated volume(see Col 16 Ln 14-16), a event detection unit for detecting event occurrence(Col 6 Ln 20-47 & Fig. 1 item 120A), a replication stopping unit for stop communication between computer and storage volume(Col 5 Ln 36-45 & Col 4 Ln 16-23 & Fig. 1 item 120B & Col 11 Ln 42-64), the illegal intrusion detection unit for detecting illegal intrusion(Fig. 1 item 135, 137, 139 & Col 16 Ln 26-Col 17 Ln 9), further the event detection unit(see Fig. 1 item 120A) receiving the detection of intrusion from illegal intrusion detection unit and the replication stopping unit stops the communication from computer and storage volume(Fig. 1 item 120). And further discloses first, second memory see Col 15 Ln 65- Col 16 Ln 1.

10. Regarding Claim 9, Kuznetsov discloses the computer virus detection unit detecting viruses in storage see Abstract & Col 15 Ln 30-64, event detection unit receiving detection form computer virus detection unit see Fig. 1 item 120A, and replication stopping unit to stop communication upon detection of virus see Fig. 1 item 120.

11. Regarding Claim 14, Kuznetsov discloses the data protection apparatus with a computer system having a storage volume(Fig. 1 item 32), a computer for reading/writing data(Fig. 1 item 22), a control unit for controlling communication between storage volume(Fig.1 item 30) and replicated volume(see Col 16 Ln 14-16), a event detection unit for detecting event occurrence(Col 6 Ln 20-47 & Fig. 1 item 120A), a replication stopping unit for stop communication between computer and storage volume(Col 5 Ln 36-45 & Col 4 Ln 16-23 & Fig. 1 item 120B & Col 11 Ln 42-64), the illegal intrusion detection unit for detecting illegal intrusion(Fig. 1 item 135, 137, 139 & Col 16 Ln 26-Col 17 Ln 9), further the event detection unit(see Fig. 1 item 120A) receiving the detection of intrusion from illegal intrusion detection unit and the replication stopping unit stops the communication from computer and storage volume(Fig. 1 item 120), the alteration detection unit for detecting the differences between log data see Col 17 Ln 25-43 and further the use of registers for restoring values see Col 20 Ln 49-65. And further discloses first, second memory see Col 15 Ln 65- Col 16 Ln 1.

12. Regarding Claim 15, Kuznetsov discloses the delay of time between writing to replicated volume from storage volume see Col 22 Ln 40-63(the use of flip-flops introduces delay).

13. Regarding Claim 16, Kuznetsov discloses the plurality of memories see Col 15 Ln 12-17 & Col 15 Ln 66-Col 16 Ln 1 & Fig. 9 item 126,122, 128, 156; and the switching of writing destination at time intervals see Fig. 9 item 30.

14. Regarding Claim 17, Kuznetsov discloses the transferring of data to another storage see Fig. 9 item 152.

15. Regarding Claim 19 see Claim 14 above and Claim 7 above.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

    U.S. Patent 5,367,682 to Chang

    U.S. Patent Publication 2002/0078366 A1 to Raice

    U.S. Patent 5,964,889 to Nachenberg

    U.S. Patent 5,319,776 to Hile et al.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkatanarayanan Perungavoor whose telephone number is 571-272-7213. The examiner can normally be reached on 8-4:30.If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Venkatanarayanan Perungavoor
Examiner
Art Unit 2132

VP
2/7/2006

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